PREFACE

There has been a growing demand for custom rate information as more and more Alberta farmers become involved in either custom work or land rental. In tight economic times, these alternatives to owning assets have their greatest appeal. As custom agreements are being negotiated, it is useful to know what others are paying or charging for similar services. Since 1977, Alberta Agriculture has annually surveyed custom rates to provide information to farmers and custom operators making custom work decisions.

This publication presents a summary of custom work and land rental rates during 1982. They are intended only as a guide for 1983. Further information related to custom rate decisions may be found in the publication Farm Machinery Costs As A Guide to Custom Rates - 1983 Agdex 805-4.

We draw your attention to the yellow brochure in the center of this publication. Our plan is to prepare a Directory of Custom Operators in Alberta for 1984. Your cooperation in contributing to this directory will be appreciated.

This publication was prepared by Gerd Andres from data collected by Janice Osrunn, Cheryl Porteous and Wayne Clelland. The present series of annual surveys was initiated by Mac Harvey in cooperation with the joint Unifarm - Alberta Agriculture Input Monitoring Systems (AIMS). The department gratefully acknowledges the contribution of the farmers and custom operators who willingly cooperated by providing information about their custom rates.

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INTRODUCTION

Many farmers, because of labor requirements, economics or other reasons do not choose to own all farm machinery. Custom services can often be hired as an alternative way to obtain machinery services. This is particularly true where present machinery can not handle the volume in the time available or where annual volume is small.

Custom work can be defined as contracting men, power units, machinery or other equipment for performing specific farm jobs. Depending on the type of custom operator (casual, part-time or full-time operator), custom rates normally include all costs for operating (variable costs) and some or all costs for owning machinery (fixed costs). Additional costs for labor, management and profit may also be included. Costs for materials such as chemicals, fertilizers, seed and extra labor is not included in custom rates unless specified.

Objective

The Annual Custom Rate Survey began as a response to a need for this type of information by farmers, custom operators and agriculturists. Thus, during 1982, Alberta Agriculture's Statistics Branch and the Farm Business Management Branch continued to collect custom rate information in Alberta.

The specific objective of this publication was to organize and report 1982 custom rates for certain custom operations on the farm. No effort was made to evaluate "fairness" of reported rates. The goal was to report what is being charged, not what should be charged.

Sample Size

The reader should note that the sample size is often small and thus, reported rates should only be used as general indications of rates that are being charged for the various custom operations in Alberta. Custom rates in this publication do not replace the necessity to evaluate individual custom operation on their own merit. Custom rates in this publication are not to be interpreted as recommended rates. To calculate and evaluate individual custom operations, worksheets are provided on Page 18 and 19 of this publication.

Use of Custom Rates

Custom rate information can be useful to many people involved in agriculture and other related activities. Farmers may find custom rates useful as a GUIDE for machinery management, budgeting and financial planning for credit needs. Also, custom rates can be useful as GUIDES in negotiating settlements for work performed for neighbors or others. Lenders, educators, government institutions

and others doing budgeting or planning analysis may also find custom rates useful as GUIDES in their work. Custom operators can use the GUIDES to compare their own rate with the market rate in a certain area.

Understanding the Tables

Custom rates for various operations in Alberta are illustrated on pages 5 to 17. The tables are itemized under type of **operation** surveyed, location where rates apply, most common rates charged in 1981, range of rates charged in 1982 and most common rates charged in 1982. Under the heading **location,** six regions were identified. These regions are outlined on the map on the next page. Where the **location** is identified as south, central and north, two regions are combined into one location. South consists of Region 1 and 2, Central consists of Region 3 and 4 , and North consists of Region 5 and 6.

Custom rates in 1982 for the various operations are shown as **Range-1982** and **Most Common-1982.** The rates quoted most often by custom operators are under the heading **Most Common-1982.** Variations in rates from lowest to highest are under the heading **Range-1982.** The reason for these ranges are due to many factors of which some are listed below.

Lower rates may be influenced by:

a) neighborly work exchange;
b) location of job in relation to home base of custom operator;
c) custom operator's desire to cover variable costs, but not necessarily all fixed costs;
d) use of older equipment which does not reflect current investment cost;
e) the farmer hiring custom services may provide some part of the costs such as: his own labor, meals, fuel, supervision, transportation or other convenience services; and
f) the size of job.

Higher rates may be influenced by:

a) full-time custom operators who are covering all costs;
b) charging what the market will bear;
c) tough jobs requiring extra power, repairs, fuel or time;
d) field conditions such as rocks, rough terrain, obstructions, or high yield crops; and
e) small size jobs.

WOOD
BUFFALO
NATIONAL
PARK
PEACE
RIVER
REGION
• FAIRVIEW
6
NORTH
EAST
REGION
4
• BARRHEAD
NORTH WEST
REGION
5
WILLMORE
WILDERNESS
PARK
JASPER
NATIONAL
PARK
VERMILION •
NORTH CENTRAL REGION
• RED DEER
3
BANFF
NATIONAL
PARK
SOUTH CENTRAL REGION
2
• CALGARY
1
SOUTHERN REGION
• LETHBRIDGE
WATERTON LAKES
NATIONAL PARK
Alberta
CANADA
AGRICULTURAL REGIONS
• REGIONAL OFFICE

HOW TO USE CUSTOM RATE INFORMATION

Rates quoted in this publication for the various custom operations are expressed in numerous ways (per hour, ton, tonne, bale, acres, etc.). Before comparing the various custom operations, always choose the appropriate basis in which to compare. For example, grain harvesting may require a per acre cost as compared to corral cleaning where a per tonne is more appropriate. When custom rates are given in dollars per hour a person is advised to always convert to a physical unit cost (bushels, tonnes, acres) that is appropriate to that operation. A low cost per hour can be a very high cost per acre, tonne, etc. Thus, analyzing the rates should be done with care.

Since custom rates quoted in this publication may not suit all custom operators and those hiring custom work, it is advisable to calculate ones own custom costs. The worksheets on page 18 and 19 provide a means for doing the calculations.

RATES SURVEYED

OPERATION	LOCATION	MOST COMMON - 1981	RANGE - 1982	MOST COMMON - 1982
Ground Seeding	South	$5.50-6.00/AC	$1.50-2.40/AC	[illegible]
* One Report Surveyed June 1982 Total Reports 8	Central	$5.50-6.00/AC	$4.50-5.50/AC	[illegible]
	North	$5.50-6.00/AC	* $6.25/AC	*[illegible]
Aerial Seeding	South	$2.75-3.60/AC	$3.00-7.00/AC	[illegible]
* One Report Surveyed June 1982 Total Reports 9	Central	$2.75-3.60/AC	$2.75-3.50/AC	[illegible]
	North	$2.75-3.60/AC	* $2.85/AC	*[illegible]
Granular Fertilizer Application Truck Mount, Floaters & Pull-Type	Region 1	$2.00/AC	$2.25-3.50/AC	[illegible]
	Region 2	$2.00/AC	$ .65-4.00/AC	[illegible]
	Region 3	$2.00/AC	$1.75-5.00/AC	[illegible]
	Region 4	$2.00/AC	$2.50-2.75/AC	[illegible]
* One Report Surveyed June 1982 Total Reports 41	Region 5	$2.00/AC	*$1.50/AC	*[illegible]
	Region 6	$2.00/AC	$2.50-3.00/AC	[illegible]
Aerial Granular Fertilizer	South	$2.50-6.00/AC	$2.75-6.00/AC	[illegible]
* One Report Surveyed June 1982 Total Reports - 4	Central	$2.50-6.00/AC		
	North	$2.50-6.00/AC	*$3.50/AC	*[illegible]
Anhydrous Ammonia Application	Region 1		$435-495/Ton	[illegible]
	Region 2		$450-510/Ton	[illegible]
	Region 3		$465-495/Ton	[illegible]
	Region 4		$420-495/Ton	[illegible]
Surveyed June 1982 Total Reports 27	Region 5			
	Region 6		$452-485/Ton	[illegible]
Liquid Fertilizer Application	South		$2.00-3.00/AC	[illegible]
* One Report Surveyed June 1982 Total Reports 11	Central		$2.25-5.00/AC	[illegible]
	North		* $3.25/AC	*[illegible]

RATES SURVEYED

OPERATION	LOCATION	MOST COMMON - 1981	RANGE - 1982	MOST COMMON - 1982
Herbicide Application Truck, Floater & Pull-Type	Region 1	$1.50-2.50/AC	$2.00-2.75/AC	[illegible]
	Region 2	$1.50-2.50/AC	$1.50-3.00/AC	[illegible]
	Region 3	$1.50-2.50/AC	$1.75-2.75/AC	[illegible]
	Region 4	$1.50-2.50/AC	$ .75-3.50/AC	[illegible]
	Region 5	$1.50-2.50/AC	$2.50/AC	[illegible]
Surveyed June 1982 Total Reports 39	Region 6	$1.50-2.50/AC	$ .75-3.25/AC	[illegible]
Aerial Herbicide	Region 1	$2.25-4.00/AC	$2.65-5.35/AC	[illegible]
	Region 2	$2.25-4.00/AC	$2.50-3.60/AC	[illegible]
	Region 3	$2.25-4.00/AC		
	Region 4	$2.25-4.00/AC	$2.50-3.50/AC	[illegible]
	Region 5	$2.25-4.00/AC	$2.40-3.75/AC	[illegible]
Surveyed June 1982 Total Reports 26	Region 6	$2.25-4.00/AC	$2.75-3.75/AC	[illegible]
Cutting & Conditioning Hay	Region 1	$8.00-10.00/AC	$6.00-11.00/AC	[illegible]
	Region 2	$8.00-10.00/AC	$4.50-10.00/AC	[illegible]
	Region 3	$8.00-10.00/AC	$4.00-8.00/AC	[illegible]
	Region 4	$8.00-10.00/AC	$6.00-8.00/AC	[illegible]
	Region 5	$8.00-10.00/AC	$5.00-10.00/AC	[illegible]
Surveyed July 1982 Total Reports 45	Region 6	$8.00-10.00/AC	$4.00-5.00/AC	$5.00/AC
Baling Round Bales	Region 1	$3.00-5.00/Bale	$3.50-5.00/Bale	[illegible]
	Region 2	$3.00-5.00/Bale	$5.00-10.00/Bale	[illegible]
	Region 3	$3.00-5.00/Bale	$3.00-7.50/Bale	[illegible]
	Region 4	$3.00-5.00/Bale	$4.00-5.00/Bale	[illegible]
	Region 5	$3.00-5.00/Bale	$4.00-5.00/Bale	[illegible]
Surveyed July 1982 Total Reports 32	Region 6	$3.00-5.00/Bale	$5.00-7.50/Bale	[illegible]

RATES SURVEYED

OPERATION	LOCATION	MOST COMMON - 1981	RANGE - 1982	MOST COMMON - 1982
Baling Small Square	Region 1	$.25-.30/Bale	$.25-.50/Bale	
	Region 2	$.25-.30/Bale	$.25-.50/Bale	
	Region 3	$.25-.30/Bale		
	Region 4	$.25-.30/Bale	$.26-.28/Bale	
	Region 5	$.25-.30/Bale	$.20-.30/Bale	
Surveyed July 1982 Total Reports 24	Region 6	$.25-.30/Bale		
Stacking and Hauling Small Square Bales	Region 1	$.15-.25/Bale	$.16-.30/Bale	
	Region 2	$.15-.25/Bale	$.20-.25/Bale	
	Region 3	$.15-.25/Bale	$.25-.28/Bale	
	Region 4	$.15-.25/Bale	$.30/Bale	
	Region 5	$.15-.25/Bale		
Surveyed July 1982 Total Reports 22	Region 6	$.15-.25/Bale		
Stacking and Hauling Round Bales	South	$2.50/Bale	$2.00-3.00/Bale	
	Central	$2.50/Bale	$2.00-2.50/Bale	
Surveyed July 1982 Total Reports 9	North	$2.50/Bale	$1.00-2.00/Bale	
Harvesting and Hauling Silage	South	$102-110/hr	$100-215/hr	
	Central	$102-110/hr	$ 96-190/hr	
Surveyed August 1982 Total Reports 18	North	$102-110/hr		
Swathing, Harvesting and Hauling Silage	South	$107-115/hr	$175-220/hr	
	Central	$107-115/hr	$179-245/hr	
Surveyed August 1982 Total Reports 6	North	$107-115/hr		
Silage Swathing	South	$5.00/AC	$6.00-9.00/AC	
	Central	$5.00/AC	$4.50-7.00/AC	
Surveyed August 1982 Total Reports 7	North	$5.00/AC		

RATES SURVEYED

OPERATION	LOCATION	MOST COMMON - 1981	RANGE - 1982	MOST COMMON - 1982
Ensiling	South	$2.00/Ton	$1.25-2.15/Tonne	$2.15-2.10/Tonne
Packing				
* One Report	Central	$2.00/Ton	*$1.00/Tonne	*$1.00/Tonne
Surveyed August 1982				
Total Reports 5	North	$2.00/Ton		
Combining	Region 1	$12-15/AC	$12-35/AC	$13-15/AC
	Region 2	$12-15/AC	$6-22/AC	$12-15/AC
	Region 3	$12-15/AC	$9-13/AC	$9-13/AC
	Region 4	$12-15/AC	$10-15/AC	$10-15/AC
* One Report	Region 5	$12-15/AC	*$11/AC	*$11/AC
Surveyed September-October 1982				
Total Reports 29	Region 6	$12-15/AC	*$15/AC	*$15/AC
Combining and Trucking	Region 1		** $15-18/AC	$17-18/AC
	Region 2		$10-17/AC	$14-15/AC
	Region 3		$ 9-17/AC	$15/AC
	Region 4		$15-20/AC	$15-20/AC
* One Report				
** $40/AC for irrigated crop	Region 5		$15-16/AC	$15-16/AC
Surveyed September-October 1982				
Total Reports 20	Region 6		* $21/AC	*$21/AC
Grain Hauling	South	$.10/Bu or $30-35/hr	$.10-.14/Bu $30-32.70/hr	$.14/Bu $30/hr
* One Report	Central	$.10/Bu or $30-35/hr	*$20/hr	* $20/hr
Surveyed September-October 1982				
Total Reports 9	North	$.10/Bu or $30-35/hr	*$40/hr	* $40/hr
Grain Swathing	South	$4.50-5.00/AC	$4-8/AC	$5/AC
* One Report	Central	$4.50-5.00/AC	*$3/AC	*$3/AC
Surveyed September-October 1982				
Total Reports 10	North	$4.50-5.00/AC	$3.00-4.50/AC	$3.00-4.50/AC

RATES SURVEYED

OPERATION	LOCATION	MOST COMMON - 1981	RANGE - 1982	MOST COMMON - 1982
Grain Drying	South	$.15-.20/Bu		
	Central	$.15-.20/Bu	$.13-.40/Bu	$.13-40/Bu
Surveyed September-October 1982 Total Reports 5	North	$.15-.20/Bu	$.50/Bu	$.50/Bu
Cultivating	South	$2.70-4.75/AC	$3.70-6.00/AC	$3.70-6.00/AC
* Pasture Cultivating	Central	$2.70-4.75/AC	$2.30-4.00/AC	$2.30-4.00/AC
Surveyed December 1982 Total Reports 14	North	$2.70-4.75/AC	*$2.50-7.00/AC	*$2.50-7.00/AC
Discing	South	$5.50-6.00/AC	$4.70-8.00/AC	$4.70-8.00/AC
	Central	$5.50-6.00/AC	$5.20-5.50/AC	$5.20-5.50/AC
Surveyed December 1982 Total Reports 10	North	$5.50-6.00/AC	$3.75/AC	$3.75/AC
Plowing	South	$5.00-18.00/AC	$7.50-20.00/AC	$17.00-20.00/AC
* Solonetzic Soil - One Report	Central	$5.00-18.00/AC	*$80/AC	
Surveyed December 1982 Total Reports 6	North	$5.00-18.00/AC		
Rototilling	South		$70-100/AC	$70-100/AC
	Central			
Surveyed December 1982 Total Reports 5	North			
Breaking Disc or Cultivator	South			
* One Report	Central		$55-90/hr	$55-90/hr
Surveyed December 1982 Total Reports 5	North		* $100/hr	* $100/hr
Brushing	South		$60-68/hr	$60-68/hr
	Central		$74-100/hr	$74-100/hr
Surveyed December 1982 Total Reports 7	North			

RATES SURVEYED

OPERATION	LOCATION	MOST COMMON - 1981	RANGE - 1982	MOST COMMON - 1982
Fencing 3 and 4 wires, Labor & Equipment Surveyed November 1982 Total Reports 14	South	$600-1000/Mile	$700-3168/Mile	
	Central	$600-1000/Mile	$1000-1500/Mile	
	North	$600-1000/Mile		
Fencing 4 wires, Labor, Equipment & Material		$1500/mile	$3000-6650/Mile	
Fencing 3 and 4 Planks			$.85-1.00/Ft	
Pulling Out Fence			$275-450/Mile	
Pounding Post Surveyed November 1982 Total Reports 13			$25-55/hr	
Corral Cleaning * Tandem Truck Spreader ** Liquid Manure Tank Surveyed November 1982 Total Reports 5	South	$30-165/hr	* ** $38-58/hr	
	Central	$30-165/hr	$105-140/hr	
	North	$30-165/hr		
Grain Processing	South	$9.00/Ton	$12.00-27.00/Tonne	
	Central	$9.00/Ton	$7.00-10.00/Tonne	
Surveyed November 1982 Total Reports 7	North	$9.00/Ton		
Livestock Hauling 50,000 lb. Possum Belly * Up to 50 miles ** Per loaded mile over 175 miles Surveyed November 1982 Total Reports 10			* $110-200 ** $2.28-2.60/Mile	

MACHINE RENTAL

EQUIPMENT	NUMBER OF REPORTS	RANGE	COMMON
Seed Drill	3	$ .70-1.00/AC	$ .70-1.00/AC
Dry Fertilizer Equipment	5	$15-45/Day	$40/Day
(Pull-Type)	4	$1.00-5.00/AC	$1.00-5.00/AC
	7	$3.00-7.00/Ton	$4.00-6.00/Ton
Anhydrous Ammonia Equipment	2	$70.00/Ton	$70.00/Ton
Liquid Fertilizer Equipment	1	$2.25/AC	$2.25/AC
Herbicide Equipment (Trucks)	2	$ .70/AC	$ .70/AC
Floater	1	$2.75/AC	$2.75/AC
Disc	1	$3.00/AC	$3.00/AC
Tractors *	5		
Under 60 PTO H.P.			$ .12/hr/PTO H.P.
60-100 PTO H.P.			$ .14/hr/PTO H.P.
100-180 PTO H.P.			$ .10/hr/PTO H.P.
4 WD			$ .19/hr/PTO H.P.

* Minimum number of hours may apply

LAND LEASING

Land leasing is an important element of farming today. Forty percent of land rented in Alberta is paid on a cash basis. Sixty percent surveyed had a cropshare arrangement. The figures reveal an upward trend of three percent in cropshare agreements. At the same time the cash rent situation has reduced three percent. Cropshare agreements involve a sharing of risk between landlord and tenant, while cash rent leases leave all risk with the tenant.

The major factors that seem to influence the rental rates for land are:

1) The demand for rental land in the area;
2) Variation in the quality and productivity of land;
3) Transactions at arm's length;
4) The dependability of the tenant;
5) The length and terms of the lease or cash rent agreement; and
6) Location

The rates listed below are broken into major regions of the province. The variability in the price is basically due to the above factors.

CASH RENT CROPLAND

OPERATION	LOCATION	MOST COMMON - 1981	RANGE - 1982	MOST COMMON - 1982
	Region 1	$25-40/AC * $75-120/AC	$20-65/AC * $65-200/AC ** 1-2 Tonnes/AC	[illegible]
	Region 2	$25-40/AC	$25-60/AC	[illegible]
	Region 3	$30-35/AC	$25-65/AC	[illegible]
	Region 4	$25-35/AC	$7-55/AC	[illegible]
	Region 5	$10-35/AC	$6-42/AC	[illegible]
	Region 6		$8-35/AC	[illegible]

* Irrigated Land
** Payment made in Tonnes of Sugar Beets
Surveyed May, June 1982
Total Reports 90

ADDITIONAL INFORMATION FOR CASH RENT ARRANGEMENTS

- 76% of cash rent surveyed on cropland in 1982 were by written agreement.
- 1% of the agreements were for a 4 year term.
- 4% of the agreements were for a 2 year term.
- 12% of the agreements were for over a 5 year term.
- 18% of the agreements were for a 5 year term.
- 28% of the agreements were for a 1 year term.
- 37% of the agreements were for a 3 year term.
- 27% of the cash rent agreements stipulated payment in the fall.
- 34% of the cash rent agreements stipulated payment both in the spring and fall.
- 39% of the cash rent agreements stipulated in the spring.

CROPSHARE ARRANGEMENTS

Region	Number of Leases	Cropshare Agreement (Percent)		Contribution of Fertilizer & Chemicals (Percent)	
		Landlord	Tenant	Landlord	Tenant
1	1	20	80	20	80
	1	30	70	30	70
	1	35	65	35	65
	5	33	66	--	100
	3	33	66	33	66
	5	33	66	--	--
	3	50	50	50	50
2	1	15	85	100	--
	1	17	83	100	--
	2	17	83	--	--
	26	33	66	--	100
	4	33	66	33	66
	3	33	66	--	* --
	3	40	60	40	60
	4	50	50	50	50
	1	50	50	33	66
	1	50	50	--	100
3	1	30	70	--	--
	2	33	66	--	--
	5	33	66	--	100
	2	33	66	33	66
	1	33	66	--	** --
	1	40	60	--	100
4	1	33	66	--	100
	2	33	66	100	--
	2	33	66	33	66
	1	50	50	--	100

CROPSHARE ARRANGEMENTS (con't)

Region	Number of Leases	Cropshare Agreement (Percent)		Contribution of Fertilizer & Chemicals (Percent)	
		Landlord	Tenant	Landlord	Tenant
5	2	25	75	--	100
	1	33	66	--	--
6	4	25	75	--	100
	1	25	75	25	75
	2	33	66	--	100
	18	33	66	33	66
	2	33	66	50	50

* Tenant paid 100% for chemicals, 50% for fertilizer
** Tenant paid 66% for chemicals, 100% for fertilizer
Surveyed May, June 1982
Total Reports 113

ADDITIONAL INFORMATION FOR CROPSHARE ARRANGEMENTS

- 52% of cropshare leases surveyed on cropland in 1982 were by written agreement.
- 1% of the agreements were for a term of 4 years.
- 5% of the agreements were for a term of 2 years.
- 6% of the agreements were for a term of over 5 years.
- 9% of the agreements were for a term of 5 years.
- 37% of the agreements were for a term of 3 years.
- 43% of the agreements were for a term of 1 year.

CASH RENT - PASTURE

LOCATION	MOST COMMON - 1981	RANGE - 1982	MOST COMMON - 1982
South	$5.50-12/A.U.M.	$2-15/A.U.M.	$10-14/A.U.M.
Central	$6-10/A.U.M.	$6-14/A.U.M.	$6-8/A.U.M.
North	$6-10/A.U.M.	$1-6/A.U.M.	$1-6/A.U.M.

Surveyed May, June 1982
Total Reports 40

ADDITIONAL INFORMATION FOR PASTURE LAND

- 2% of pasture land agreements surveyed were for a term of over 5 years.
- 10% of pasture land agreements surveyed were for a term of 5 years and 3 years respectively.
- 76% of pasture land agreements surveyed were for a term of 1 year.
- 46% of the pasture land arrangements surveyed in 1982 were by written agreement.

SPECIAL AREAS, INDIVIDUAL AND ASSOCIATION GRAZING LEASES

LOCATION	1981	1982
South	$1.78/A.U.M.	$1.55/A.U.M.
Central	$1.49/A.U.M.	$1.29/A.U.M.
North	$ .89/A.U.M.	$ .77/A.U.M.

Surveyed May, June 1982

GRAZING RESERVES

LOCATION	1981	1982
South	$6.90/A.U.M. $8.45/A.U.M.	$7.10/A.U.M. *$8.70/A.U.M.
Central	$6.10/A.U.M.	$6.30/A.U.M.
North	$5.40/A.U.M.	$5.70/A.U.M.

* Irrigated Land
Surveyed May, June 1982

MACHINERY COST WORKSHEET

Machine.....**Original Cost**.....**Annual Hours of Use**.....

Replacement Cost .....**Sale Value**.....**Years of Use**.....

			Yearly Cost	Hourly Cost
FIXED COSTS (Calculated on Yearly Basis)				
1. Depreciation	= $\frac{\text{Replacement Cost - Cash Sale Value}}{\text{Years of Use}}$	$\frac{\$\ldots\ldots - \$\ldots\ldots}{\ldots\ldots\text{Years}}$	$ _____	
2. Investment Cost	= $\frac{\text{Original Cash Cost + Cash Sale Value}}{2}$ X Interest Rate	$\frac{\$\ldots\ldots + \$\ldots\ldots}{2}$ X .....%	$ _____	
3. Insurance & Housing	= Original Cash Cost X 1%	$..... X .....%	$ _____	
4. TOTAL FIXED COSTS PER YEAR			$ ═══ (A)	
5. TOTAL FIXED COSTS/HOUR	= Total Costs/Year/Hours of Annual Use	$..... ÷ $.....hr		$ ═══ (B)
VARIABLE COSTS (Calculated on Hourly Basis) (use following formulas if actual costs are not known)				
1. Fuel Cost	= Litre/Hour X Price/Litre	..... X $..... X	$_____	
2. Lubrication	= Fuel Cost X 15%	$..... X .....%	$_____	
3. Repairs	= $\frac{\text{Original Purchase Price X Annual Repair Rate}}{\text{Hours of Annual Use}}$	$\frac{\$\ldots\ldots \text{ X } \ldots\ldots\%}{\ldots\ldots\text{hrs}}$		$ _____
4. TOTAL VARIABLE COSTS PER HOUR				$ ═══ (C)
5. TOTAL VARIABLE COSTS PER YEAR	= Total Variable Costs/Hour X Hours of Annual Use	$..... X .....hr	$ ═══ (D)	

TOTAL COSTS PER YEAR (A+D) = $..... + $..... $ _____

TOTAL COSTS PER HOUR (B+C) = $..... + $..... $ _____

MACHINERY CUSTOM CHARGE WORKSHEET[1]

Operation ..... **Power Unit** ..... **Implement(s)** ..... **Acres/Hour** .....

FIXED COSTS PER HOUR[2]	**Power Unit**	**Machine 1**	**Machine 2**
A. Depreciation	$ _____	$ _____	$ _____
B. Investment Cost	$ _____	$ _____	$ _____
C. Insurance & Housing	$ _____	$ _____	$ _____
D. Total Fixed Cost (A+B+C)	$ _____ (P)	$ _____ (R)	$ _____ (S)
E. Total Fixed Machine(s) Costs (P+R+S)			$ ═══ (E)
VARIABLE COSTS PER HOUR[3]			
F. Fuel Cost	$ _____	$ _____	$ _____
G. Lubrication	$ _____	$ _____	$ _____
H. Repairs	$ _____	$ _____	$ _____
I. Total Variable Cost (F+G+H)	$ _____ (T)	$ _____ (U)	$ _____ (V)
J. Total Variable Machine Cost (T+U+V)			$ ═══ (J)
K. TOTAL MACHINE COST PER HOUR (E+J)		$ _____ (K)	
L. LABOR COST PER HOUR		$ _____ (L)	
M. PROFIT MARGIN (20-50% of Variable Cost + Labor)		$ _____ (M)	
N. FULL COST + PROFIT (K+L+M)		$ ═══ (N)	
O. TOTAL CHARGE/ACRE (N ÷ Acres/Hour)		$ ═══	

1 May refer to Farm Machinery Costs as a Guide to Custom Rates.
2 Refer to Machinery Cost Worksheet and divide by annual hours of use.
3 Refer to Machinery Cost Worksheet.

POINTS TO CONSIDER IN A CUSTOM HIRING AGREEMENT

Custom hiring is a business arrangement. As in all business arrangements, the agreement should outline the rights and duties of all the parties involved. A written agreement is advisable to avoid misunderstandings in case of a dispute. The following points should be considered in a custom hiring agreement.

1. **Operations:** The agreement should provide a description of the exact operations to be performed by the parties and the machines, materials and labor to be supplied by each party.

2. **Timeliness:** Significant losses can occur if an operation is not started or completed on time. To facilitate planning, a custom hiring agreement should include a schedule of operations for both parties. Such a schedule would be subject to weather conditions and crop maturity. Reasonable notice should be provided by each party when circumstances alter the schedule for operations.

3. **Rate Schedule:** The custom operator, for each operation to be performed, should stipulate his rate on the basis of acreage, time (week, day, hour) or total operation performed.

4. **Payment:** The agreement should stipulate the terms of payment for custom operations. The custom operator should bill the client on completion of each custom operation indicating the actual units (acres, hours, etc.) completed, the rate charged per unit, the total charge and the due date for payments.

5. **Down-Time:** The parties should consider a clause in the agreement, regarding responsibility for down-time as a result of machine breakdown.

6. **Termination:** The agreement should include a clause for a minimum period of notice for termination. A penalty should be stated for unjustified termination of the agreement.

7. **Liability:** The parties should consider a clause stipulating the responsibility for liability claims as a result of damage to personal property.

8. **Management:** The custom agreement should secure provisions that the custom operator will employ acceptable management practices in his operations.

For additional information and sample agreements for the above, refer to the publication "Custom Farming Agreement", Alberta Agriculture, Agdex 817-10.

METRIC CONVERSION TABLE

1 hectare (ha)	=	2.5 acres
1 kilometre (km)	=	0.625 miles
1 metre (m)	=	3.3 feet
1 centimetre (cm)	=	0.39 inches
1 kilogram (kg)	=	2.2 pounds
1 tonne (t)	=	1.1 tons or 1200 pounds
1 tonne (t)	=	36.7 bu. of wheat
	=	45.9 bu. of barley
	=	64.8 bu. of oats
	=	44.1 bu. of rapeseed
1 litre (l)	=	0.22 gallons
1 kilowatt (kw)	=	1.34 horsepower
1 acre	=	.4 hectares
1 mile	=	1.6 kilometres
1 foot	=	.3 metres
1 inch	=	2.5 centimetres
1 pound	=	.45 kilograms
1 ton	=	.91 tonnes
1 bu. of wheat	=	27.3 kilograms
1 bu. of barley	=	21.8 kilograms
1 bu. of oats	=	15.5 kilograms
1 bu. of rapeseed	=	22.7 kilograms
1 horsepower	=	.75 kilowatts

1 kilogram per hectare = 0.9 pounds per acre (approximately)

1 pound per acre = 1.1 kilograms per hectare (approximately)

If a fertilizer recommendation is given in kilograms per hectare and the machine is calibrated in pounds per acre, set the machine at 10% less than the recommendation to obtain the desired rate.